

IN THE CLAIMS:

1-4. (Canceled)

5. (Currently Amended) An isolated Porcine Reproductive and Respiratory Syndrome virus (PRRSV) comprising a recombinant nucleic acid being an *in vitro*-transcribed RNA of a cDNA copy of a PRRSV genome, ~~lacking genetic information in any of ORFs 1a, 1b, and 2-7~~ with a deletion in an ORF selected from any of ORFs 1a, 1b, and 2-7.

6. (Canceled)

7. (Currently Amended) A host cell with or transfected with a recombinant nucleic acid comprising at least one full-length DNA copy or *in vitro* transcribed RNA copy of an RNA virus's genome, wherein the RNA virus's genome is Porcine Reproductive and Respiratory Syndrome virus, and wherein the RNA virus's genome comprises SEQ ID NO: 18.

8-9. (Canceled)

10. (Currently Amended) An isolated DNA molecule comprising an infectious clone based upon a Porcine Reproductive and Respiratory Syndrome virus's genome, wherein the Porcine Reproductive and Respiratory Syndrome virus's genome comprises SEQ ID NO: 18, said infectious clone produced by a process comprising:

producing a recombinant nucleic acid comprising a nucleic acid sequence selected from the group consisting of an *in vitro*-transcribed RNA copy of the RNA virus's full length genome and DNA complementary to the RNA virus's full length genome.

11-13. (Canceled)

14. (Previously Presented) The genetically modified RNA virus of claim 20 wherein the infectious clone further comprises at least one nucleic acid sequence encoding a virulence marker

and/or a serological marker particular to said positive strand RNA virus, and wherein said at least one nucleic acid sequence has been modified to effect a change in virulence and/or a changed serological immune response.

15. (Previously Presented) The genetically modified RNA virus of claim 14 wherein the nucleic acid sequence encoding said virulence or serological marker or virulence and serological markers is located within any of the genome's open reading frames encoding structural viral proteins.

16. (Previously Presented) The genetically modified RNA virus of claim 20 further comprising a nucleic acid sequence comprising at least one open reading frame and wherein said at least one open reading frame is substituted by an ortholog of PRRSV's ORF7.

17. (Previously Presented) The genetically modified RNA virus of claim 20 wherein at least one additional heterologous nucleic acid sequence is inserted into the recombinant nucleic acid, allowing the genetically modified RNA virus to serve as a delivery system for said at least one heterologous nucleic acid sequence.

18. (Previously Presented) The genetically modified RNA virus of claim 17 wherein said heterologous nucleic sequence encodes an antigen.

19. (Previously Presented) The genetically modified RNA virus of claim 20, further comprising a nucleic acid sequence comprising at least one open reading frame, said at least one open reading frame having been modified to effect a change in virulence and/or a change in serological response in vivo in an animal into which the the genetically modified RNA virus has been introduced.

20. (Currently Amended) A genetically modified RNA virus based upon a Porcine Reproductive and Respiratory Syndrome virus's (PRRSV's) genome, wherein the genetically

modified RNA virus's genome comprises SEQ ID NO: 18, said genetically modified RNA virus produced by a process comprising:

transfecting a host cell with a recombinant nucleic acid comprising a nucleic acid sequence selected from the group consisting of an *in vitro*-transcribed RNA copy of the PRRSV's full length genome, an *in vitro*-transcribed RNA copy of the PRRSV genome but lacking the genetic information needed to produce enveloped, infectious RNA virus, DNA complementary to the PRRSV's full length genome, and DNA complementary to the PRRS genome, but lacking genetic information needed to produce enveloped, infectious PRRSV; wherein the host cell is not susceptible to infection with said PRRSV, to produce said genetically modified RNA virus.

21. (Previously Presented) A vaccine comprising the genetically modified RNA virus of claim 20.

22. (Previously Presented) A cell culture infected with the genetically modified RNA virus of claim 20.

23-24. (Canceled)

25. (Currently Amended) A DNA comprising nucleic acid comprising:

DNA complementary to a Porcine Reproductive and Respiratory Syndrome virus (PRRSV) genome, ~~but lacking genetic information encoding an envelope protein of said PRRSV~~
with a deletion in an ORF selected from any of ORFs 1a, 1b, and 2-7.

26. (Canceled)

27. (Previously Presented) The genetically modified RNA virus of claim 20 wherein the host cell constitutively expresses at least one structural protein of the PRRSV.

28. (Previously Presented) A genetically modified RNA virus produced by a process of the type wherein a host cell is transfected with an infectious clone of an RNA virus to produce the genetically modified RNA virus, wherein the improvement comprises:

using, in said process, a Porcine Reproductive and Respiratory Syndrome virus as the RNA virus, and using a host cell not susceptible to infection with said RNA virus to produce said genetically modified RNA virus, and rescuing the genetically modified RNA virus therefrom.

29. (Currently Amended) A recombinant nucleic acid comprising an infectious clone based upon a positive strand RNA virus's genome, wherein said RNA virus is a Porcine Reproductive and Respiratory Syndrome virus, and wherein the RNA virus's genome comprises SEQ ID NO: 18, said infectious clone produced by a process comprising:

producing a recombinant nucleic acid comprising a nucleic acid sequence selected from the group consisting of an *in vitro*-transcribed RNA copy of the RNA virus's full length genome, an *in vitro*-transcribed RNA copy of the RNA virus genome but lacking the genetic information encoding the at least one envelope protein, DNA complementary to the RNA virus's full length genome, and DNA complementary to the RNA virus genome, but lacking genetic information encoding the at least one envelope protein.

30. (Currently Amended) A composition for raising an immune response against a positive strand RNA virus's genome in an animal, wherein said positive strand RNA virus is Porcine Reproductive and Respiratory Syndrome virus, and wherein the positive strand RNA virus's genome comprises SEQ ID NO: 18, said composition comprising:

a recombinant nucleic acid sequence selected from the group consisting of
an *in vitro*-transcribed RNA copy of the positive strand RNA virus genome, but lacking the genetic information encoding the at least one envelope protein,
DNA complementary to the positive strand RNA virus's full length genome, and
DNA complementary to the positive strand RNA virus genome, but lacking genetic information encoding the at least one envelope protein.

31. (Currently Amended) A cell culture containing a positive strand RNA virus's genome, wherein said positive strand RNA virus is Porcine Reproductive and Respiratory Syndrome virus, and wherein the positive strand RNA virus's genome comprises SEQ ID NO: 18, and wherein said cell culture is infected with or transfected with recombinant nucleic acid selected from the group consisting of

an *in vitro*-transcribed RNA copy of the positive strand RNA virus genome, but lacking the genetic information encoding the at least one envelope protein,

DNA complementary to the positive strand RNA virus's full length genome; and

DNA complementary to the positive strand RNA virus genome, but lacking genetic information encoding the at least one envelope protein.